16 February 2023

Email: forecasting.planning@aemo.com.au

Dear Sir/Madam

Draft 2023 ISP Inputs, Assumptions and Scenarios Report

Council welcomes the opportunity to make a submission on the Draft 2023 IASR and consents for this submission to be published on the AEMO website. Our detailed submission is attached (Attachment 1). Council has made a number of submissions to earlier Integrated System Plan (ISP) consultation processes and would like this submission to be considered alongside our previous submissions, as many of the issues raised earlier have not been resolved. In particular Council's call for undergrounding of high voltage powerlines, and for this preferred option to be consistently factored into ISP scenarios, assumptions and costing, needs to be reconsidered.

In September 2022 Council set a new position on the development of wind farms in the Shire. This position calls for a pause on the approval of any new wind farms until such time as the State Government has carried out strategic planning including setting a threshold for the number of turbines in Moyne (Attachment 2). Additionally, Council continues to call for undergrounding of transmission infrastructure, seeking greater community benefits and that proposals minimise impacts on townships and the environment. Addressing decommissioning of wind farms is also key.

Council understands that the 2022 ISP predicted up to 3450 MW of wind energy will be built by 2040 in the South West Victorian Renewable Energy Zone (SWVREZ) and a new transmission line will need to be built to the Mortlake substation to transport this electricity. In addition over 3550 MW of offshore wind is predicted for the Portland Coast Offshore Wind Zone (PCOWZ) which now extends to the coastline adjacent to Moyne Shire.

The cumulative impacts of transmission infrastructure and wind farms, is already an issue for Council and its community. Noise, visual, traffic, road, housing and environmental impacts are consistently raised by the community as areas of concern. Greater development of the SWVREZ, coupled with development in the PCOWZ and investment in new transmission infrastructure, will result in further clusters of renewable energy generation facilities in the Moyne Shire. This will exacerbate cumulative social and environmental impacts. A strategic land use planning approach

which manages cumulative impacts is needed to stop further clusters and mitigate future impacts. ISP scenarios should take into account development thresholds (upper limits) that will limit cumulative impacts or developing clusters and consequent loss of social licence.

The greater focus on gaining social licence and community consultation for REZ development in the IASR is noted. Council welcomes the establishment of the Social Licence Advisory Council, and urges AEMO to place a priority on these issues and developing methods for integrating social licence and cumulative impacts into modelling of scenarios. Council is keen to see how this will translate to planning for the SWREZ and PCOWZ which are earmarked for early development. Council would like to participate fully in the REZ design process as a matter of urgency.

Within Moyne Shire there are 6 operational wind farms, 3 under construction, 4 seeking planning & environmental approval and 1 in the feasibility stage. If all these wind farms are constructed the Shire will host approximately 720 turbines, generating about 3 GW of electricity and covering over 12 % of Moyne Shire's rural land area. These wind farms are creating 2 distinct geographical clusters in the north east and west of the Shire as can be seen by the attached map (Attachment 3).

Should you have any queries about this submission please don't hesitate to contact Michelle Grainger, Manager Energy Projects at mgrainger@moyne.vic.gov.au

Yours sincerely

Brett Davis
Chief Executive Officer

Attachments:
1. Council Submission
2. Council's wind farm position statement
3. Moyne Shire wind farm map

ATTACHMENT 1:
MOYNE SHIRE COUNCIL SUBMISSION
DRAFT 2023 INPUT, ASSUMPTIONS AND SCENARIOS REPORT

Introduction

Council recognises that AEMO's modelling predicts the need for a doubling of electricity generation by 2050 and a nine-fold increase in generation from wind and solar farms to meet this electricity demand as coal fired power stations retire. Much of these new generation resources will be built in Renewable Energy Zones (REZ) and will require approximately 10,000 km of transmission infrastructure.

Council also recognises that the Victorian Government has a target to achieve 40% of electricity generated from renewable sources by 2025, 65% by 2030 and 95% by 2035. The Victoria Government has also committed to net zero greenhouse gas emissions by 2050. It is understood that both policies will require the construction of more wind and solar farms in rural and offshore areas for the targets to be met.

The ISP's plans for investment in new transmission infrastructure, however does not present a plan for the orderly development of generations facilities that will use the infrastructure in each REZ. A holistic approach to REZ development needs to be activated for the South West Victoria REZ and Portland Coast OWZ as soon as possible. Issues identified in the ISP and recommendations to reduce impacts and facilitate integrated planning were included in our previous submission and included:

Issues

- Cumulative social and environmental impacts from REZ Development
- Noise impacts of generation and transmission infrastructure
- Visual and rural land use impacts from high voltage powerlines
- Disproportionate impacts on rural communities
- Permit compliance and enforcement
- Decommissioning and sustainable disposal of components
- Community engagement and building social licence

Recommendations

- Strategic Land Use Planning for REZ
- Government funded strategic economic and social development in host communities
- Undergrounding of high voltage powerline
- Resourcing compliance and enforcement
- Decommissioning strategy
- Lock in community benefits and engagement standards
- Lock in local content and job requirements

Please refer to Council's submission on the 2022 Draft ISP for further detail on these matters.

The Draft 2023 IASR

Comments on sections of the Draft Inputs Assumptions and Scenario report are detailed below.

Section 2.2 Scenario narrative and descriptions

Scenario 2 and 3 (Orchestrated Step Change and Diverse Step Change) are too similar in name and content. The use of descriptors like orchestrated and diverse, are too technical to engage the general public or non-technical stakeholders and do not provide a clear label for the scenario or a snap shot of the differences between them.

Section 2.5 Sensitivities (p 24)

Offshore wind

Some Offshore wind farm permit applications have progressed to the Environmental Effects Statement stage in Victoria, others are well into the feasibility stage and are negotiating agreements with land holders for access to build transmission lines. This coupled with the *Commonwealth Offshore Wind Electricity Infrastructure Act 2021* and the declaration of areas off the coast of Gippsland for Offshore Electricity Infrastructure signals that offshore wind project development should be modelled and not just be included as a sensitivity in Victoria. Coordination of transmission infrastructure for OWZ and adjacent REZ development (e.g. the SWVREZ and the PCOWZ) using an integrated approach needs to be highlighted in the 2024 ISP and modelled for the optimal development pathways where appropriate.

Social licence

Social licence should be included as a sensitivity when assessing the scenarios. With a faster pace of change in some scenarios, that relies on more large scale wind, solar and transmission infrastructure in clusters, social licence is more likely to be lost, delays experienced and costs increased. To gain and maintain social licence undergrounding of transmission lines will be required, also adding to cost. It is recommended that AEMO urgently engage experts to develop a model or set of indicators based on lived experience and social research that can be implemented for the 2024 ISP.

Land requirements

The Victorian Offshore Wind Policy Directions paper predicted land availability constraints if the State was going to meet its renewable energy and emissions targets through onshore VRE development. For example, achieving 60GW using only onshore wind and largescale solar could require up to 70 per cent of agricultural land, or four times the area of Greater Melbourne. This was one of the drivers for developing an Offshore Wind policy.

It is recommended that AEMO complete a similar analysis for REZ development across the NEM, taking into account a suitable (economical) distance from transmission infrastructure, resources, residential density etc. This would help to answer the questions as to whether there is enough available land close to available transmission to host the magnitude of

development that is required to realise each scenario. This would also help to inform social licence sensitivities and cumulative impact assessment.

Cumulative impacts
Thresholds or tipping points for unacceptable levels of cumulative social and/or environmental impacts in a REZ, region or locality should form a sensitivity or parameter when modelling. This could be the percentage of land under development, numbers of properties impacted by powerlines, density of turbines, towns or communities with development on more than one side/viewpoint, cumulative bird kills etc. It is very evident in Moyne that there is a tipping point at which community no longer supports further development. At this tipping point there will be development delays due to loss of social licence, pressure to change transmission infrastructure routes and withdrawal of potential host land holders. To define these parameters would also require social research, collation of data already available from individual wind farm reporting (e.g. birds and bat strikes) and the collation of expert evidence from lived experience.

3.1 Public Policy Settings
Other policy setting that could be considered include:

- Commonwealth Offshore Wind Electricity Infrastructure Act 2021
- Victoria's Gas Substitution Roadmap
- Declaration of the Offshore Electricity Infrastructure (Declared Area) in Bass Strait, off Gippsland

3.9.2 REZ social licence and resource limits
One of the foundations of the REZ concept is clustering of facilities for economic efficiencies. However this foundation concept is also the one that creates the majority of issues that fall under the banner of cumulative impacts and loss of social licence. It is pleasing to read that AEMO has recognised that REZ development is likely to be limited by social licence rather than renewable resources or land availability. This is the lived experience in Moyne Shire, where development has been occurring for 20 years. Clusters of development in other agricultural areas of the NEM, especially close to rural towns is likely to also result in loss of social licence and development delays, unless the approach to assessing and overcoming the issues of cumulative impacts is changed.

From the experience in Moyne Shire a number of key changes need to be implemented to gain and maintain social licence. This includes:

- Implementing undergrounding of high voltage powerlines as the standard option for development technically feasible, and where not possible co-location or sharing of transmission infrastructure. Undergrounding of the Mortlake South Wind Farm shows that undergrounding is technically and financially feasible as it is recommended that a detailed case study of this development be developed and promoted. Co-location is also feasible, as demonstrated by the agreement between Dundonnell and Mt Fyans wind farms to share an AusNet transmission infrastructure. However disappointingly, Mt Fyans wind farm have applied for a separate transmission line and substation in

their recent planning application, highlighting regulatory issues with this sharing arrangement.

- 5 km buffers around towns and settlements where development cannot occur.
- Distance between developments so that “back to back” developments cannot occur to from contiguous clusters.
- Density limits within developments.
- Thresholds for development in for local areas within a REZ.
- Increased distance between turbines and residences, especially as turbines become taller (reducing the impacts of noise and blade shadow & flicker on nearby residents.
- Transmission infrastructure provides for community benefits, neighbour benefits and land holder payments in line with wind farms benefit programs.
- Ameliorating impacts on housing availability and rental costs
- Early, continuous and genuine engagement where communities can influence the outcome.

The importance of gaining and maintaining social licence has been highlighted since the inaugural ISP in 2018, so it is disappointing that AEMO and other jurisdictions have not yet developed a system that accounts for issues that will impact on social licence, including cumulative impacts, as a part of the scenario planning process and development decisions making. There is ample experience from a range of areas across Victoria (and emerging in other States) that can be studied to develop social licence indicators and models for use in the ISP. Some of the factors above could form part of a set of indicators of social licence.

The ISP states *“social licence will require urgent and continuing focus”* and the ESB REZ Planning Consultation paper (2020) states that “*a REZ that is selected for development needs to have state government and community support*”. However, limited resources have been dedicated to study and take account of these issues in planning and decision making. It now requires urgent action if the transition to renewable energy is to meet the electricity demands of the future.